



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,949	04/02/2004	Kenichiro Yagawa	8045-1020	8938
466	7590	02/05/2008		
YOUNG & THOMPSON 745 SOUTH 23RD STREET 2ND FLOOR ARLINGTON, VA 22202			EXAMINER JACKSON, BLANE J	
			ART UNIT 2618	PAPER NUMBER
			MAIL DATE 02/05/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/815,949

Applicant(s)

YAGAWA, KENICHIRO

Examiner

Blane J. Jackson

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 2-5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Information Disclosure Statement***

The Information Disclosure Statements filed 27 December 2004, 02 April 2004 and 30 October 2007 have been made of record.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tseng et al. (US 5,896,568) in view of LaGrotta et al. (US 2003/0027597).

As to claim 1, Tseng teaches a base station apparatus comprising a baseband signal processing unit performing baseband signal processing and a plurality of RF signal processing units each performing RF signal processing:

said baseband signal processing unit and said plurality of RF signal processing units are connected by cables transmitting a digital signal bidirectionally (figures 1b, 2b and 4, column 4, lines 41-64, DSP server (4040) performs the baseband signal processing and cell sites (4020) is the plurality of RF signal processing units connected by T1/E1 ATM cables for control and voice communications),

said baseband signal processing unit multiplexes at least one signal of a CPU-to-CPU communication signal, a frame timing signal, frame number, and a reference clock with a baseband signal, for transmission to each of said plurality of RF signal processing units (figures 1b and 2b, column 2, lines 57 to column 3, line 2 and column 3, lines 39-57, a baseband signal processing unit located in the base station controller comprising baseband functions such as channel coding, interleaving, framing and other control functions consistent with the communication protocol are multiplexed with the voice or traffic data for bidirectional transmission across an ATM digital fiber optic cable to each cell site),

said plurality of RF signal processing units each multiplexes at least one signal of the frame timing signal and the CPU-to-CPU communication signal with a demodulated digital signal, for transmission to said baseband signal processing unit (column 2, line 57 to column 3, line 57, cell site includes an RF/ IF conversion, digital/ analog conversions and control equipment to process the voice and control data multiplexed on the ATM network).

Tseng teaches a base station with redistributed access functions for the PCS telecommunication network but is silent as to a redistributed base station for the CDMA network.

La Grotta teaches an over the air optical or cable link to connect a geographically distributed base station applicable to a wireless communication standard such as CDMA or TDMA, figures 1, 2 and 5, paragraphs 0016-0020 and 0028.

It would have been obvious to one of ordinary skill in the art at the time of the invention to realize the PCS wireless access architecture of Tseng may be implemented in a CDMA network as taught by LaGrotta such that the distributed base station conforms to the local predefined wireless communication standard.

### ***Allowable Subject Matter***

Claims 2-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. As to claim 2, the prior art made of record does not teach the baseband signal processing unit comprising the particular claim elements defined in the claim. As to claim 4, the prior art made of record does not teach the plurality of RF signal processing units comprising the particular claim elements defined in the claim.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure includes Thorson et al. (Us 2002/0123365) which discloses a base station subsystem comprising a base station controller and several base transceiver subsystems connected by a T1/E1 trunk line interfaced for voice, control and data traffic.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blane J. Jackson whose telephone number is (571) 272-7890. The examiner can normally be reached on Monday through Thursday, 7:30 AM-6:00 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

